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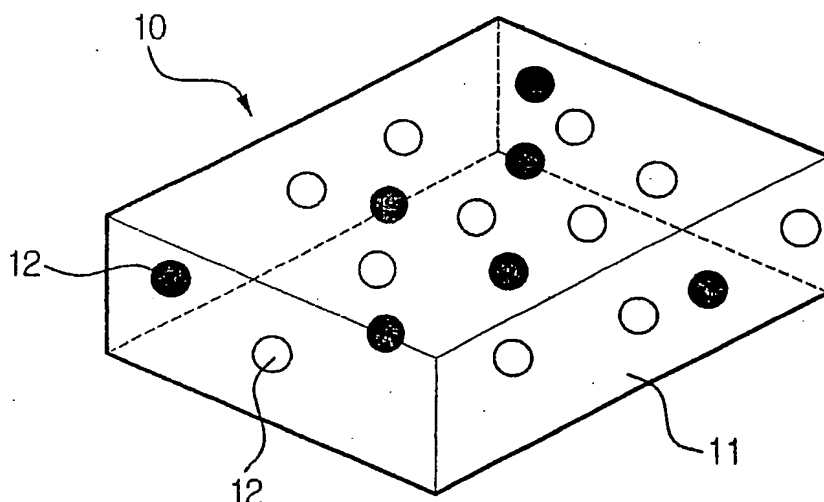
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(54) Title: RANDOM-TYPE IDENTIFYING MATERIAL, 3-D IDENTIFYING SYSTEM AND METHOD USING THE SAME



(57) Abstract: The present invention relates to a random type recognition object for an identification apparatus wherein identification particles are distributed irregularly within a 3D shape and a positional value and a characteristic value of the identification particles distributed within the 3D shape in one or plural directions are recognized by separate recognition means, and an identification apparatus and method using a random type recognition object whose reproduction is impossible. Furthermore, the present invention relates to a product authentication system and method in which a purchaser transmits data extracted from a recognition object distributed together with

a product using a recognition apparatus to an authentication system in order to determine whether purchased product is genuine, the authentication system transmits information on a product coincident with the received data to the purchaser, and the purchaser compares the purchased product with the information on the product received from the authentication system to determine whether the product is genuine.